Math 4 4ed

Lesson Plan Overview

| Lesson | Worktext Pages | Activities Pages | Lesson Objectives |
| --- | --- | --- | --- |
| Chapter 1 · Place Value & Money |
| 1 | 1, 3–4 | 1–2 | * Identify 10 hundreds as 1 one thousand
* Identify the Ones, Hundreds, and Thousands periods
* Identify the number of periods in up to a 6-digit number
* Identify the value of each digit in a 4-digit number
 |
| 2 | 5–6 | 3–4 | * Recall that the value of each place is ten times greater than the value of the place immediately to its right
* Identify the values of the digits in a number with 9 or fewer digits
* Read and write numbers with 6 or fewer digits
 |
| 3 | 7–8 | 5–6 | * Recall the repetition of the Ones, Tens, and Hundreds places in each period
* Read numbers with 9 or fewer digits
* Write numbers with 9 or fewer digits in standard, expanded, and word form
 |
| 4 | 9–10 | 7–8 | * Use strategies to compare numbers
* Use >, <, and = to compare numbers with 7 or fewer digits
* Compare numbers written in standard, expanded, and word form
 |
| 5 | 11–12 | 9–10 | * Order numbers from least to greatest
* Order numbers from greatest to least
* Identify even and odd numbers
 |
| 6 | 13–14 | 11–12 | * Identify the numbers that are of 10; 100; 1,000; 10,000; 100,000; and 1,000,000

12* Round a number to the place with the greatest value
* Round a number to a given place within the number
 |
| 7 | 15–16 | 13–14 | * Rename 10 tenths as 1 one
* Read and write decimals to the Tenths place
 |
| 8 | 17–18 | 15–16 | * Rename 10 hundredths as 1 tenth
* Read and write decimals to the Hundredths place
 |
| 9 | 19–20 | 17–18 | * Write amounts of money that are less than $1.00
* Determine the value of a set of money
* Count out amounts of money
 |
| 10 | 21–22 | 19–20 | * Count out money needed to purchase an item
* Count back change by counting on coins
* Count back change by counting on dollars
 |
| 11 | 23–24 | 21–22 | * Rename to write and represent numbers in 3 different ways
 |
| 12 | 25–26 | 23–24 | * Review the concepts presented in Chapter 1 in preparation for the Chapter 1 Test
 |
| 13 | STEAM 1–2 |  | * Identify the problem that needs to be solved
* Design a room with furnishings and plants
* Create a purchase list within a set budget
* Present a concept design
* Write a check for a purchase
* Explain how math can be used to make wise choices
 |
| 14 |  | 25–26 | Concept Review |
|  |
| Chapter 2 · Addition & Subtraction of Whole Numbers |
| 15 | 27, 29–30 | 27–28 | * Use addition and subtraction properties to solve facts
* Apply the Associative Property of Addition to make 10
* Complete a missing-addend equation with a variable
* Use variables when adding doubles
* Complete a function table
 |
| 16 | 31–32 | 29–30 | * Add 2- and 3-digit numbers with renaming
* Estimate the sum by rounding
* Solve addition problems with 3 addends
 |
| 17 | 33–34 | 31–32 | * Identify the number that is 1,000 or 10,000 more or less
* Add 4- and 5-digit numbers with renaming
* Estimate the sum by rounding
* Solve a word problem with 3 addends
 |
| 18 | 35–36 | 33–34 | * Rename pennies to add money, using manipulatives
* Round amounts of money to the place with the greatest value
* Add amounts of money
* Solve a money word problem and interpret the solution
 |
| 19 | 37–38 | 35–36 | * Interpret the result of subtracting 0
* Subtract 2- and 3-digit numbers with renaming
* Estimate the difference by rounding
* Solve a missing-addend equation with a variable
 |
| 20 | 39–40 | 37–38 | * Subtract 4- and 5-digit numbers with renaming
* Check a subtraction problem with addition
* Estimate the difference by rounding
* Solve a multi-step word problem and interpret the solution
 |
| 21 | 41–42 | 39–40 | * Subtract 3-digit numbers with renaming
* Rename 1 one thousand and 1 ten thousand
* Solve a word problem and interpret the solution
 |
| 22 | 43–44 | 41–42 | * Subtract amounts of money
* Round amounts of money to the place with the greatest value
* Solve money word problems
* Solve a multi-step word problem and interpret the solution
 |
| 23 | 45–46 | 43–44 | * Estimate the sum of 3 or 4 addends by rounding to the place with the greatest value
* Estimate the difference by rounding to the place with the greatest value
* Estimate the sum or difference by rounding to the greatest place in the lesser number
 |
| 24 | 47–48 | 45–46 | * Solve different types of subtraction problems
* Identify the type of subtraction
* Solve a subtraction word problem and interpret the solution
 |
| 25 | 49–50 | 47–48 | * Solve word problems using a cost chart
* Solve word problems using variables
 |
| 26 | 51–52 | 49–50 | * Review the concepts presented in Chapter 2 in preparation for the Chapter 2 Test
 |
| 27 | STEAM 27–28 |  | * Identify the problem that needs to be solved
* Design technology for randomly selecting a 3-digit number, using the digits 1–6
* Apply rounding and estimation principles collaboratively to reach a target number
* Evaluate information using estimation principles
 |
| 28 |  | 51–52 | Concept Review |
|  |
| Chapter 3 · Fractions |
| 29 | 53, 55–56 | 53–54 | * Identify 1 whole as being equivalent to , , and

223344* Relate the terms numerator and denominator to their meanings
* Identify the fraction that names part of a whole
 |
| 30 | 57–58 | 55–56 | * Identify part of a set and use the correct numerator and denominator to describe it
* Write the fraction that names part of a set
* Predict the results of a probability activity
 |
| 31 | 59–60 | 57–58 | * Determine the fraction of a set
* Determine probability
 |
| 32 | 61–62 | 59–60 | * Compare and order like fractions
* Compare unlike fractions
 |
| 33 | 63–64 | 61–62 | * Add like fractions
* Subtract like fractions
* Solve a fraction word problem and interpret the solution
 |
| 34 | 65–66 | 63–64 | * Identify and read a mixed number
* Identify an improper fraction
* Write an improper fraction as a mixed number
* Compare mixed numbers using >, <, or =
 |
| 35 | 67–68 | 65–66 | * Add mixed numbers
* Subtract mixed numbers
 |
| 36 | 69–70 | 67–68 | * Determine the fractional parts of a whole
* Interpret a circle graph
 |
| 37 | 71–72 | 69–70 | * Review the concepts presented in Chapter 3 in preparation for the Chapter 3 Test
 |
| 38 | STEAM 53–54 |  | * Identify the problem that needs to be solved
* Design and build a cell phone holder prototype using Lego® bricks
* Test that the design is a workable, durable structure
* Summarize in whole numbers, mixed numbers, and fractions the number of bricks used
* Explain how math helps you do work
 |
| 39 |  | 71–72 | Concept Review |
|  Chapter 4 · Multiplication & Division Facts |
| 40 | 73, 75–76 | 73–74 | * Apply the terms factor and product
* Create an array to show related multiplication facts
* Apply the Identity Property of Multiplication
* Apply the Zero Property of Multiplication
* Write multiples of 2, 3, and 5
 |
| 41 | 77–78 | 75–76 | * Apply the terms dividend, divisor, and quotient
* Relate division to multiplication
* Complete a division fact with 1 as the divisor
* Complete a division fact with 0 as the dividend
* Write phrases using numbers and math symbols
 |
| 42 | 79–80 | 77–78 | * Apply the Commutative Property of Multiplication
* Write related multiplication and division facts
* Write a division fact, using three different forms
* Picture and solve word problems
* Solve facts with 9 or 10 as a factor or a divisor, using patterns
 |
| 43 | 81–82 | 79–80 | * Solve facts with 11 as a factor or a divisor, using patterns
* Use the Multiplication-Addition Principle to solve a multiplication fact
* Solve a word problem and interpret the solution
 |
| 44 | 83–84 | 81–82 | * Solve facts with 12 as a factor or a divisor, using strategies
* Use the Multiplication-Addition Principle to solve a multiplication fact
 |
| 45 | 85–86 | 83–84 | * Apply the Multiplication-Addition Principle
* Apply mental math strategies for solving multiplication facts with 6 or 9 as factors
* Solve division facts using related multiplication facts
* Solve a word problem and interpret the solution
 |
| 46 | 87–88 | 85–86 | * Apply the Associative Property of Multiplication
* Solve word problems with 3 factors
* Solve a multiplication equation with 3 factors
 |
| 47 | 89–90 | 87–88 | * Solve a missing-factor equation with a variable
* Solve math equations with 2 operations
 |
| 48 | 91–92 | 89–90 | * Solve word problems by working backward
 |
| 49 | 93–94 | 91–92 | * Review the concepts presented in Chapter 4 in preparation for the Chapter 4 Test
 |
| 50 | STEAM 73–74 |  | * Identify the problem that needs to be solved
* Identify all the different combinations of 3, 2, and 1 that equal 8, using problem-solving strategiescollaboratively
* State conclusions numerically, with pictures, or in words
* Discuss connections between math and helping others
 |
| 51 |  | 93–94 | Concept Review |
| Chapter 5 · Decimals |
| 52 | 95, 97–98 | 95–96 | * Rename 10 tenths as 1 one, using manipulatives
* Read and write a decimal to the Tenths place
* Write a decimal as a fraction or a mixed number
 |
| 53 | 99–100 | 97–98 | * Picture decimals to the Tenths place
* Write a mixed number as a decimal
* Compare decimals to the Tenths place
* Order decimals from least to greatest
 |
| 54 | 101–2 | 99–100 | * Rename 100 hundredths as 1 whole
* Rename 10 hundredths as 1 tenth
* Read and write a decimal to the Hundredths place
* Write a mixed number as a decimal
 |
| 55 | 103–4 | 101–2 | * Picture decimals to the Hundredths place
* Write a mixed number as a decimal
* Compare decimals to the Hundredths place
* Order decimals from least to greatest
 |
| 56 | 105–6 | 103–4 | * Add decimals
* Subtract decimals
* Solve a word problem and interpret the solution
 |
| 57 | 107–8 | 105–6 | * Round decimals to the nearest whole number
* Estimate the sum by rounding
* Solve 3-addend addition problems
* Estimate the difference by rounding
* Solve a decimal word problem and interpret the solution
 |
| 58 | 109–10 | 107–8 | * Rename to write and represent equivalent values
 |
| 59 | 111–12 | 109–10 | * Review the concepts presented in Chapter 5 in preparation for the Chapter 5 Test
 |
| 60 | STEAM 95–96 |  | * Identify the problem that needs to be solved
* Design an heirloom treasure
* Record an ordered inventory list of gems used
* Explain that math has limits
 |
| 61 |  | 111–12 | Concept Review |
| Chapter 6 · Multiplication: 1-Digit Multipliers |
| 62 | 113, 115–16 | 113–14 | * Multiply a 2-digit factor by a 1-digit factor
* Multiply a 3-digit factor by a 1-digit factor
* Solve a multiplication word problem and interpret the solution
 |
| 63 | 117–18 | 115–16 | * Multiply a 2-digit factor by a 1-digit factor with renaming, using manipulatives
* Multiply a 3-digit factor by a 1-digit factor with renaming, using manipulatives
* Multiply a 2- or 3-digit factor by a 1-digit factor with and without renaming
* Solve a word problem and interpret the solution
 |
| 64 | 119–20 | 117–18 | * Multiply a 2- or 3-digit factor by a 1-digit factor
* Multiply multiples of 10 by a 1-digit factor and determine the number of zeros in the product
* Multiply multiples of 100 by a 1-digit factor and determine the number of zeros in the product
* Multiply multiples of 1,000 by a 1-digit factor and determine the number of zeros in the product
 |
| 65 | 121–22 | 119–20 | * Round numbers to the nearest ten or the nearest hundred
* Estimate the product by rounding
* Multiply a 2- or 3-digit factor by a 1-digit factor
 |
| 66 | 123–24 | 121–22 | * Estimate by rounding
* Multiply a 2- or 3-digit factor by a 1-digit factor
* Solve a money multiplication word problem and interpret the solution
 |
| 67 | 125–26 | 123–24 | * Multiply a 4-digit factor by a 1-digit factor
* Estimate the product by rounding
* Solve a word problem and interpret the solution
 |
| 68 | 127–28 | 125–26 | * Solve money multiplication problems
* Solve a multi-step money word problem
* Read and complete a table
 |
| 69 | 129–30 | 127–28 | * Review the concepts presented in Chapter 6 in preparation for the Chapter 6 Test
 |
| 70 | STEAM 113–14 |  | * Research to gather data
* Identify the problem that needs to be solved
* Calculate how much food is needed
* Design, build, and test a system for accomplishing a task
* Evaluate a statement that says that work is not fun
 |
| 71 |  | 129–30 | Concept Review |
| Chapter 7 · Geometry: Plane Figures |
| 72 | 131, 133–34 | 131–32 | * Identify a point, a line, and a line segment
* Identify horizontal and vertical lines
* Identify and describe parallel and intersecting lines
* Read a map
* Draw points, lines, and line segments
 |
| 73 | 135–36 | 133–34 | * Identify and name rays
* Identify and name angles
* Demonstrate and describe a right angle, an acute angle, and an obtuse angle
 |
| 74 | 137–38 | 135–36 | * Describe regular and irregular polygons
* Identify regular and irregular polygons
* Identify a right triangle
* Identify acute and obtuse angles
 |
| 75 | 139–40 | 137–38 | * Differentiate between regular and irregular polygons
* Identify and name quadrilaterals
* Define perimeter
* Find the perimeter of a polygon
 |
| 76 | 141–42 | 139–40 | * Find the perimeter of a figure
* Count unit squares to find the area of a region
* Multiply to find the area of a region
* Solve an area word problem and interpret the solution
 |
| 77 | 143–44 | 141–42 | * Identify similar and congruent figures
* Identify symmetrical figures and a line of symmetry
* Identify a slide, a flip, and a turn
 |
| 78 | 145–46 | 143–44 | * Measure to find the perimeter of a figure
* Find the area of a region
 |
| 79 | 147–48 | 145–46 | * Identify the center point of a circle
* Identify and name the radius of a circle
* Identify and name the diameter of a circle
* Find the length of a radius and a diameter
 |
| 80 | 149–50 | 147–48 | * Find the area of a complex polygon
* Find the area of a triangle
* Identify regular and irregular polygons
* Identify parallel, intersecting, horizontal, and vertical lines
* Identify right angles, acute angles, and obtuse angles
 |
| 81 | 151–52 | 149–50 | * Review the concepts presented in Chapter 7 in preparation for the Chapter 7 Test
 |
| 82 | STEAM 131–32 |  | * Identify the problem that needs to be solved
* Design and create a polygon art picture using triangles
* Verify that the specifications have been met
* Explain why people are able to use math to create an orderly design
 |
| 83 |  | 151–52 | Concept Review |
| Chapter 8 · Division: 1-Digit Divisors |
| 84 | 153, 155–56 | 153–54 | * Solve partition and measurement division problems
* Write division word problems
 |
| 85 | 157–58 | 155–56 | * Divide to find a 1-digit quotient with a remainder
* Solve a long division problem using facts and near facts
 |
| 86 | 159–60 | 157–58 | * Solve division facts using long division
* Divide a 2-digit dividend by a 1-digit divisor
* Divide a 3-digit dividend by a 1-digit divisor
 |
| 87 | 161–62 | 159–60 | * Divide to find a 2-digit quotient with a remainder
* Divide to find a 1-digit quotient with a remainder, renaming in the dividend
* Divide to find a 2-digit quotient with a remainder, renaming in the dividend
 |
| 88 | 163–64 | 161–62 | * Divide to find a 3-digit quotient with a remainder
* Divide to find a 2-digit quotient, renaming in the dividend
* Divide to find a 3-digit quotient, using the traditional form
 |
| 89 | 165–66 | 163–64 | * Divide to find a quotient containing 0
* Check the quotient of a division problem, using multiplication
 |
| 90 | 167–68 | 165–66 | * Divide multiples of 10 and 100
* Check the quotient of a division problem
 |
| 91 | 169–70 | 167–68 | * Divide 4-digit dividends
* Divide money
* Solve a division money word problem
 |
| 92 | 171–72 | 169–70 | * Find the average of a set of 1-digit numbers
* Solve an averaging word problem
* Find the average of a set of 2-digit numbers
* Find the average of a set of 3-digit numbers
 |
| 93 | 173–74 | 171–72 | * Determine whether a number is divisible by 2, 5, or 10
* Determine the remainder of a division equation
 |
| 94 | 175–76 | 173–74 | * Review the concepts presented in Chapter 8 in preparation for the Chapter 8 Test
 |
| 95 | STEAM 153–54 |  | * Identify the problem that needs to be solved
* Calculate the total cost of camp
* Develop a monthly savings plan for camp
* Track savings and expenses toward a goal
* Use math to set and assess goals for living wisely
 |
| 96 |  | 175–76 | Concept Review |
| Chapter 9 · Data & Graphs |
| 97 | 177, 179–80 | 177–78 | * Read and interpret a pictograph and a bar graph
* Use collected data to create a tally table
* Use a tally table to create a bar graph and a pictograph
* Find the average (mean) for a set of data
* Identify the range, mode, and median for a series of values
 |
| 98 | 181–82 | 179–80 | * Create a double bar graph from a table
* Read and interpret a double bar graph
* Create a bar graph and a circle graph from a tally table
 |
| 99 | 183–84 | 181–82 | * Create a single line graph from a table
* Determine mode, range, median, and average (mean)
* Interpret a double line graph
 |
| 100 | 185–86 | 183–84 | * Write ordered pairs to identify points on a coordinate graph
* Locate and plot coordinate points on a coordinate graph
* Apply the terms scale and interval
 |
| 101 | 187–88 | 185–86 | * Create and read a line plot
* Determine the range for a set of data
* Create a stem-and-leaf plot from a line plot
 |
| 102 | 189–90 | 187–88 | * Use logic to solve an order problem
* Use logic to solve an identity problem
 |
| 103 | 191–92 | 189–90 | * Record survey data on a tally table
* Create a bar graph and a pictograph from a tally table
* Create a circle graph
* Compare a circle graph, bar graph, pictograph, and tally table
 |
| 104 | 193–94 | 191–92 | * Review the concepts presented in Chapter 9 in preparation for the Chapter 9 Test
 |
| 105 | STEAM 177–78 |  | * Identify the problem that needs to be solved
* Design and administer a survey
* Report survey findings in graphs
* Evaluate the idea that math has limits
 |
| 106 |  | 193–94 | Concept Review |
| Chapter 10 · Customary Measurement & Time |
| 107 | 195, 197–98 | 195–96 | * Recognize inches and feet as standard units of measurement
* Measure objects to the nearest inch and foot
* Estimate and measure length, width, and height to the nearest half inch or fourth inch
* Draw a line to the nearest inch, half inch, or fourth inch
 |
| 108 | 199–200 | 197–98 | * Determine the best measurement: inches, feet, or yards
* Estimate and measure length and height to the nearest inch, foot, or yard
* Recognize the mile as a standard unit of measurement for distance
* Use a map key to determine distance
 |
| 109 | 201–2 | 199–200 | * Rename yards to feet and feet to yards
* Rename feet to inches and inches to feet
* Rename miles to feet and to yards
 |
| 110 | 203–4 | 201–2 | * Recognize a pound and an ounce as measuring units for weight
* Read a spring scale
* Recognize a ton as a measuring unit for weight
* Determine the appropriate unit of weight: ounce or pound
* Rename pounds to ounces, tons to pounds, and pounds to tons
 |
| 111 | 205–6 | 203–4 | * Recognize cups, pints, quarts, and gallons as measuring units for capacity
* Determine the appropriate unit of capacity: cup, pint, quart, or gallon
* Compare capacity using >, <, or =
* Rename units of capacity
* Solve a capacity word problem
 |
| 112 | 207–8 | 205–6 | * Recognize a degree as a measuring unit for temperature
* Read and set a Fahrenheit thermometer
* Recognize standard Fahrenheit temperatures
* Use a Fahrenheit thermometer to measure temperature
* Interpret a line graph
 |
| 113 | 209–10 | 207–8 | * Tell and write time to the minute
* Identify the appropriate unit of time measure for activities
* Rename minutes to seconds, hours to minutes, and days to hours
* Compare minutes and seconds, hours and minutes, and days and hours
 |
| 114 | 211–12 | 209–10 | * Tell, write, and show time to the quarter-hour
* Tell the time before or after the hour
* Differentiate between a.m. and p.m. and between noon and midnight
 |
| 115 | 213–14 | 211–12 | * Determine the elapsed time to the hour and minute
* Determine the future time
* Solve an elapsed time word problem
 |
| 116 | 215–16 | 213–14 | * Read a calendar
* Identify the position of a month in the year and write a date
* Determine the past or future date
 |
| 117 | 217–18 | 215–16 | * Write Roman numerals for the numbers 1–12
* Recognize a pattern in writing Roman numerals
* Solve a multi-step elapsed time problem
 |
| 118 | 219–20 | 217–18 | * Review the concepts presented in Chapter 10 in preparation for the Chapter 10 Test
 |
| 119 | STEAM 195–96 |  | * Identify the problem that needs to be solved
* Collaboratively design and build a pasta car
* Make predictions, conduct tests, and record results
* Analyze design, construct arguments, and critique reasoning
* Evaluate how math is not always helpful to people in a fallen world
 |
| 120 |  | 219–20 | Concept Review |
| Chapter 11 · Multiplication: 2-Digit Multipliers |
| 121 | 221, 223–24 | 221–22 | * Multiply multiples of 10, 100, and 1,000
* Solve word problems mentally
 |
| 122 | 225–26 | 223–24 | * Apply the Multiplication-Addition Principle, using manipulatives
* Apply the Multiplication-Addition Principle, using an array
 |
| 123 | 227–28 | 225–26 | * Apply the Multiplication-Addition Principle
* Multiply a 2-digit factor by a 2-digit factor
 |
| 124 | 229–30 | 227–28 | * Apply the Multiplication-Addition Principle
* Multiply a 2-digit factor by a 2-digit factor
* Estimate the product of a multiplication word problem by rounding
 |
| 125 | 231–32 | 229–30 | * Multiply a 2-digit factor by a 2-digit factor
* Multiply a 3-digit factor by a 2-digit factor
* Solve a multiplication word problem and interpret the solution
 |
| 126 | 233–34 | 231–32 | * Multiply a 2- or 3-digit factor by a 2-digit factor
* Estimate the product of a multiplication word problem
 |
| 127 | 235–36 | 233–34 | * Multiply money
* Estimate the product of a money word problem
* Use mental math to solve a multi-step word problem
 |
| 128 | 237–38 | 235–36 | * Review the concepts presented in Chapter 11 in preparation for the Chapter 11 Test
 |
| 129 | STEAM 221–22 |  | * Identify the problem that needs to be solved
* Design a Lego brainteaser puzzle
* Calculate the total stud value of the puzzle pieces
* Record a puzzle solution and solve other puzzles
* Determine how math helps us meet others’ needs
 |
| 130 |  | 237–38 | Concept Review |
| Chapter 12 · Fractions: Addition & Subtraction |
| 131 | 239, 241–42 | 239–40 | * Identify the fraction that names part of a whole
* Identify the fraction that names part of a set
* Compare and order like fractions
* Compare unlike fractions
* Write an improper fraction as a mixed number
* Compare mixed numbers
 |
| 132 | 243–44 | 241–42 | * Determine whether fractions are less than, greater than, or equal to 1
* Determine whether fractions are less than, greater than, or equal to

12* Order unlike fractions with

12 |
| 133 | 245–46 | 243–44 | * Add like fractions
* Rename an improper fraction as a mixed number
* Subtract like fractions
* Rename 1 as an improper fraction
 |
| 134 | 247–48 | 245–46 | * Add mixed numbers
* Rename an improper fraction as a mixed number
* Subtract mixed numbers
* Rename 1 as an improper fraction
 |
| 135 | 249–50 | 247–48 | * Repartition shapes to find equivalent fractions
* Use number lines to find equivalent fractions
* Use multiplication to find equivalent fractions
 |
| 136 | 251–52 | 249–50 | * Repartition shapes to find equivalent fractions
* Add unlike fractions
* Subtract unlike fractions
 |
| 137 | 253–54 | 251–52 | * Use multiplication to find equivalent fractions
* Add unlike fractions
* Subtract unlike fractions
 |
| 138 | 255–56 | 253–54 | * Determine the fractional part of a set
* Solve a word problem and interpret the solution
 |
| 139 | 257–58 | 255–56 | * Solve fraction word problems
 |
| 140 | 259–60 | 257–58 | * Review the concepts presented in Chapter 12 in preparation for the Chapter 12 Test
 |
| 141 | STEAM 239–40 |  | * Assemble an origami figure
* Recognize fractions and their equivalents in an origami figure
* Use fractions to design a color pattern for an origami figure
* Evaluate the claim that design in our world happened by chance
* Explore origami’s connection to STEAM disciplines
 |
| 142 |  | 259–60 | Concept Review |
| Chapter 13 · Metric Measurement |
| 143 | 261, 263–64 | 261–62 | * Recognize the meter, centimeter, and millimeter as measuring units for length
* Estimate and measure length, width, and height to the nearest meter, centimeter, and millimeter
* Determine the appropriate linear unit
* Draw a line to the nearest centimeter or millimeter
 |
| 144 | 265–66 | 263–64 | * Recognize the kilometer as a measuring unit for distance
* Determine the appropriate linear unit
* Rename millimeters, centimeters, or kilometers to meters and meters to kilometers, centimeters, or millimeters
* Compare linear measurements using >, <, or =
* Solve a measurement word problem and interpret the solution
 |
| 145 | 267–68 | 265–66 | * Recognize the liter and milliliter as measuring units for capacity
* Determine the appropriate unit of capacity
* Determine the best estimate for the capacity of a container
* Rename milliliters to liters and liters to milliliters
* Compare milliliters to liters using >, <, or =
* Solve a measurement word problem and interpret the solution
 |
| 146 | 269–70 | 267–68 | * Recognize the gram and kilogram as measuring units for mass
* Determine the appropriate unit of mass
* Rename kilograms to grams and grams to kilograms
* Compare grams and kilograms using >, <, or =
* Solve a measurement word problem and interpret the solution
 |
| 147 | 271–72 | 269–70 | * Recognize degrees as a measuring unit for temperature
* Read and set a Celsius thermometer
* Recognize standard Celsius temperatures
* Determine the temperature 10° warmer or 10° colder
* Determine the amount of temperature increase or decrease
* Measure temperature using a Celsius thermometer
 |
| 148 | 273–74 | 271–72 | * Apply an understanding of metric units
* Identify the appropriate measurement tool
* Determine the temperature, given the increase or decrease from a given temperature
 |
| 149 | 275–76 | 273–74 | * Complete a table
* Use logic to extend a number sequence
* Match a set of operations to a sequence of numbers
 |
| 150 | 277–78 | 275–76 | * Review the concepts presented in Chapter 13 in preparation for the Chapter 13 Test
 |
| 151 | STEAM 261–62 |  | * Identify the problem that needs to be solved
* Make a biodegradable seedling planter and recyclable greenhouse cover
* Plant a seed and measure and record its growth
* Apply the principle of sowing and reaping to studying math
 |
| 152 |  | 277–78 | Concept Review |
| Chapter 14 · Division: 2-Digit Divisors |
| 153 | 279, 281–82 | 279–80 | * Divide a 2-digit multiple of 10 by a 2-digit multiple of 10
* Divide a 3-digit multiple of 10 by a 2-digit multiple of 10
* Solve a division word problem
 |
| 154 | 283–84 | 281–82 | * Divide by a 2-digit multiple of 10
* Solve a division word problem
 |
| 155 | 285–86 | 283–84 | * Divide by rounding the divisor
* Use multiplication to check division problems
* Solve a word problem and interpret the solution
 |
| 156 | 287–88 | 285–86 | * Divide to find a 1-digit quotient
* Solve a division word problem
 |
| 157 | 289–90 | 287–88 | * Divide to find a 1- or 2-digit quotient
* Solve a division word problem and interpret the solution
 |
| 158 | 291–92 | 289–90 | * Divide to find a 2-digit quotient
* Solve division word problems
* Divide money
 |
| 159 | 293–94 | 291–92 | * Adjust the quotient in a division problem
* Use multiplication to check a division problem
* Solve a division word problem
 |
| 160 | 295–96 | 293–94 | * Adjust the quotient in a division problem
* Divide to find a quotient containing 0
* Divide money
* Solve a money word problem
 |
| 161 | 297–98 | 295–96 | * Use multiplication and repeated addition to solve a word problem
* Use division and repeated subtraction to solve a word problem
* Solve a multi-step word problem and interpret the solution
 |
| 162 | 299–300 | 297–98 | * Review the concepts presented in Chapter 14 in preparation for the Chapter 14 Test
 |
| 163 | STEAM 279–80 |  | * Identify the problem that needs to be solved
* Design a 3-D model for testing solutions
* Show equal divisions of a square cake and its frosting
* Evaluate the reasonableness of a solution
* Recognize that math cannot determine right and wrong
* Construct a practical solution to a problem
 |
| 164 |  | 299–300 | Concept Review |
|  |
| Chapter 15 · Geometry: 3-Dimensional Figures |
| 165 | 301, 303–4 | 301–2 | * Distinguish between 2-dimensional and 3-dimensional objects
* Identify faces, edges, and vertices of 3-dimensional figures
* Identify the characteristics of a sphere
* Identify the characteristics of a cone
* Identify the characteristics of a cylinder
 |
| 166 | 305–6 | 303–4 | * Identify the characteristics of a rectangular prism
* Identify the characteristics of a square prism (cube)
* Identify the characteristics of a triangular prism
* Construct prisms from nets
* Identify a prism by its net
 |
| 167 | 307–8 | 305–6 | * Make a model of a prism
* Identify a square pyramid and a triangular pyramid
* Make models of pyramids
* Identify the characteristics of pyramids
* Construct pyramids from nets
 |
| 168 | 309–10 | 307–8 | * Add the area of each face to find the surface area
* Find the surface area of a square prism
* Find the surface area of a rectangular prism
 |
| 169 | 311–12 | 309–10 | * Use cubes to picture the volume of a 3-dimensional figure
* Use a formula to determine volume
 |
| 170 | 313–14 | 311–12 | * Recognize patterns
* Extend patterns
* Determine the missing part in a pattern
* Create a pattern
* Make a Venn diagram
 |
| 171 | 315–16 | 313–14 | * Review the concepts presented in Chapter 15 in preparation for the Chapter 15 Test
 |
| 172 | STEAM 301–2 |  | * Identify the problem that needs to be solved
* Design and build a 3-dimensional structure to withstand an attack
* Test a structure
* Apply an understanding of God’s design
 |
| 173 |  | 315–16 | Concept Review |
| Chapter 16 · Pre-Algebra |
| 174 | 317–18 | 317–18 | * Identify positive and negative numbers on a number line
* Identify the opposite of a number
* Determine positive and negative numbers
 |
| 175 | 319–20 | 319–20 | * Compare and order positive and negative numbers
* Graph positive and negative numbers on a number line
 |
| 176 | 321–22 | 321–22 | * Graph positive and negative numbers on a number line
* Order positive and negative numbers
 |
| 177 | 323–24 | 323–24 | * Graph points on a coordinate graph
* Write ordered pairs to identify points on a coordinate graph
 |
| 178 | 325–26 | 325–26 | * Use variables to represent quantities
* Complete a function table
* Graph points on a coordinate graph
 |
| 179 | 327–28 | 327–28 | * Review the concepts presented in Chapter 16 in preparation for the Chapter 16 Test
 |
| 180 |  | 329–30 | Concept Review |